FIG. 1

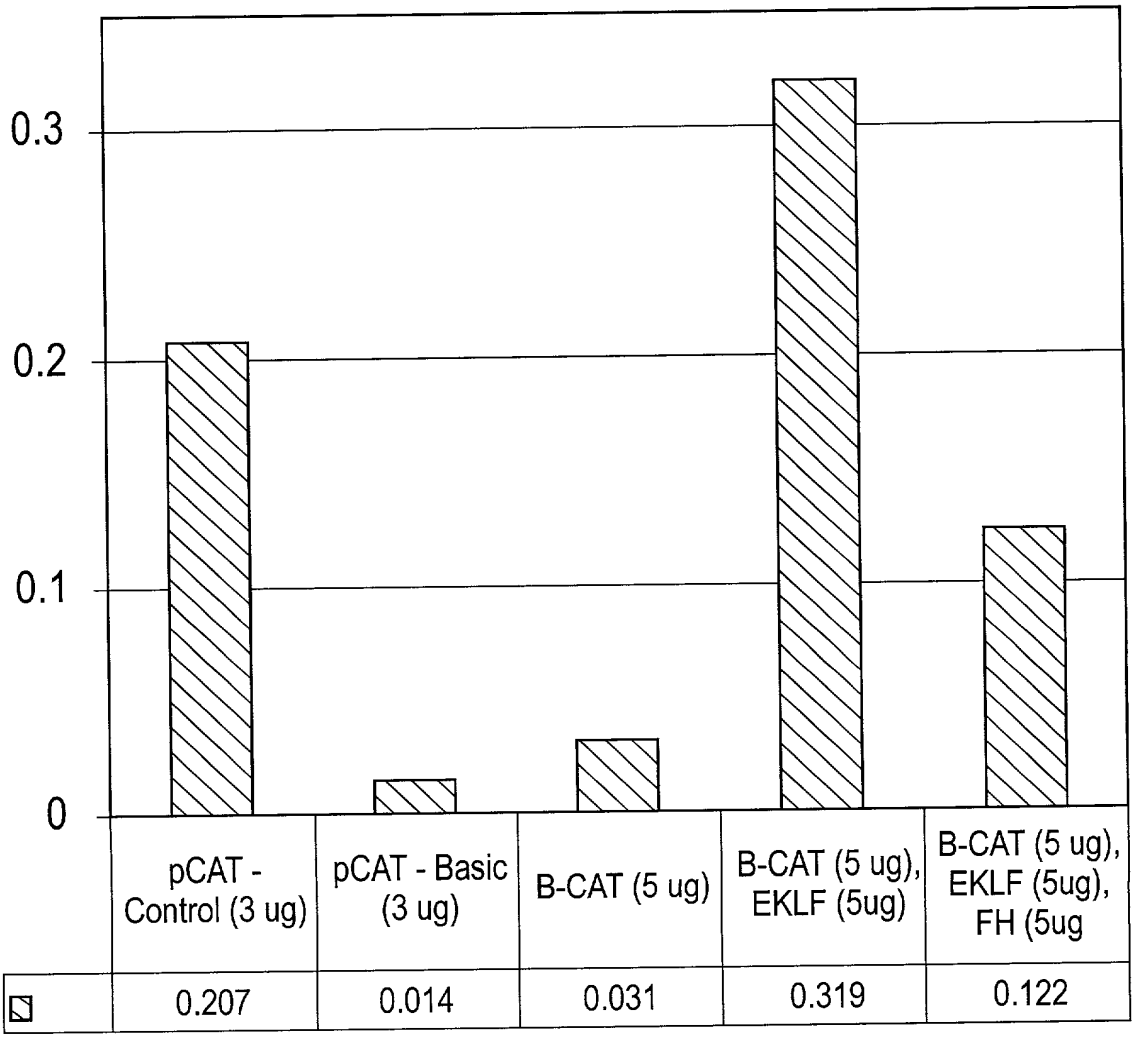
0.3
0.2
0.1
0
pCAT - Control (3 ug)
pCAT - Basic (3 ug)
B-CAT (5 ug)
B-CAT (5 ug), EKLF (5ug)
B-CAT (5 ug), EKLF (5ug), FH (5ug
0.207
0.014
0.031
0.319
0.122

FIG. 2A

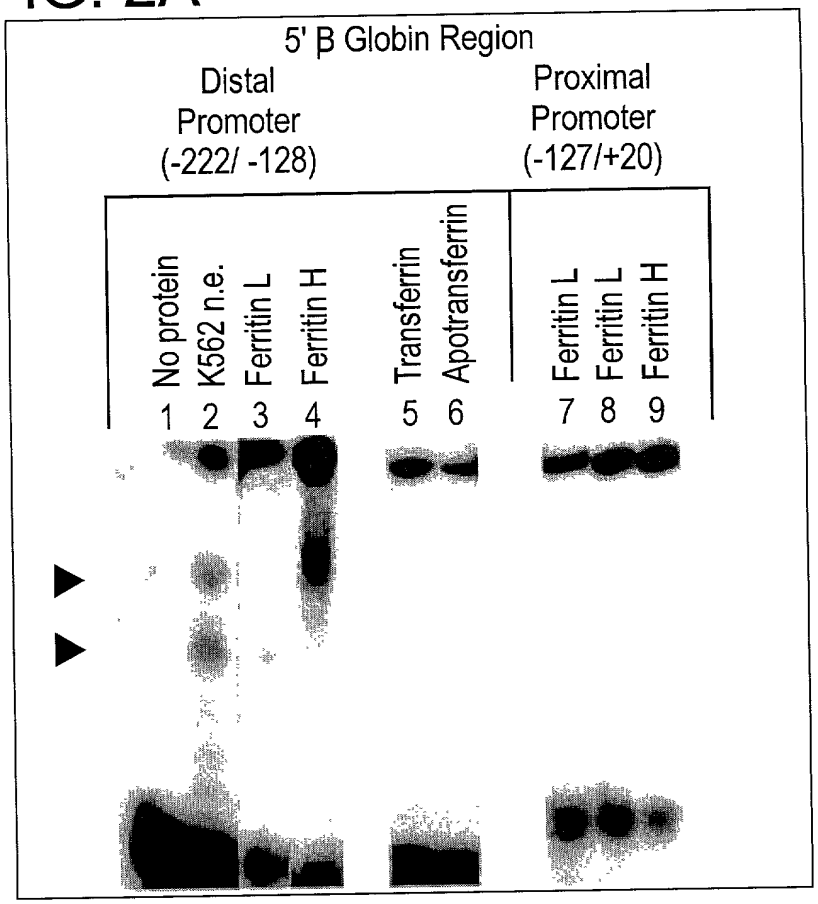
5' β Globin Region
Distal Promoter (-222/ -128)
Proximal Promoter (-127/+20)
No protein
K562 n.e.
Ferritin L
Ferritin H
Transferrin
Apotransferrin
Ferritin L
Ferritin L
Ferritin H
1 2 3 4 5 6 7 8 9

FIG. 2B

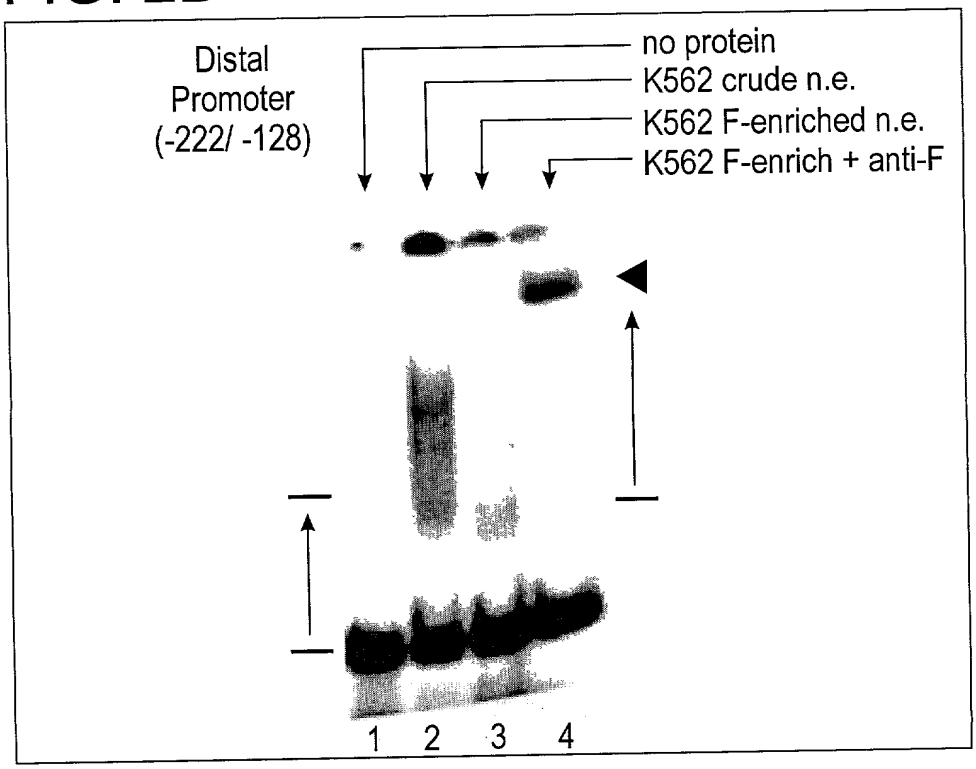
Distal Promoter (-222/ -128)
no protein
K562 crude n.e.
K562 F-enriched n.e.
K562 F-enrich + anti-F
1 2 3 4

FIG. 2C

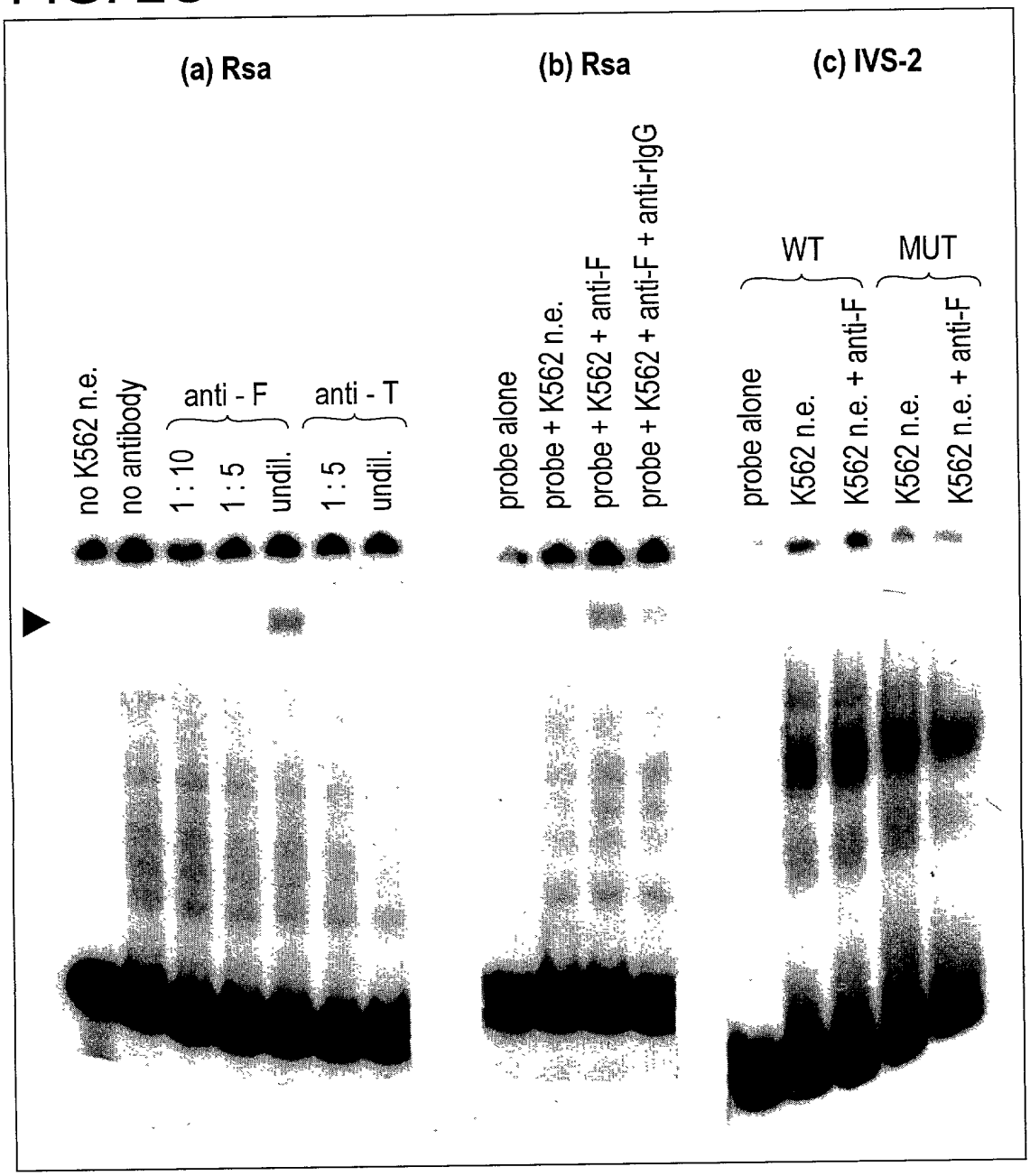
(a) Rsa
(b) Rsa
(c) IVS-2
no K562 n.e.
no antibody
anti - F
anti - T
1 : 10
1 : 5
undil.
1 : 5
undil.
probe alone
probe + K562 n.e.
probe + K562 + anti-F
probe + K562 + anti-F + anti-rIgG
WT
MUT
probe alone
K562 n.e.
K562 n.e. + anti-F
K562 n.e.
K562 n.e. + anti-F

FIG. 3A

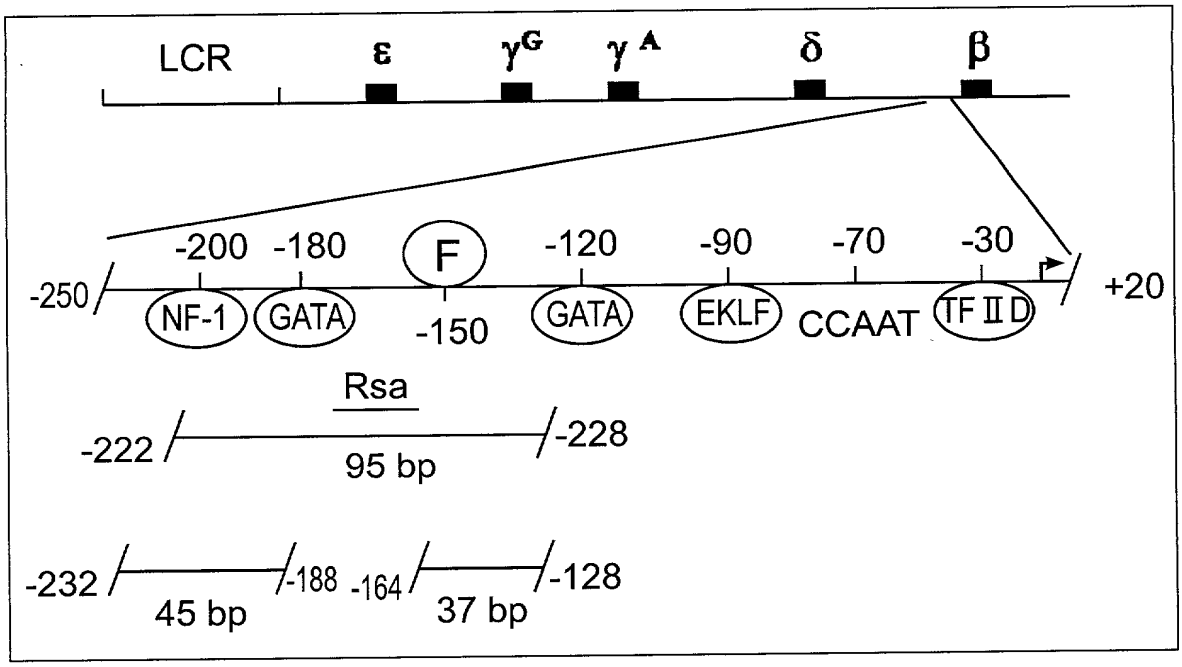
LCR
ε
γG
γA
δ
β
-200
-180
F
-120
-90
-70
-30
-250
NF-1
GATA
-150
GATA
EKLF
CCAAT
TF II D
+20
Rsa
-222
-228
95 bp
-232
-188
45 bp
-164
-128
37 bp

FIG. 3B

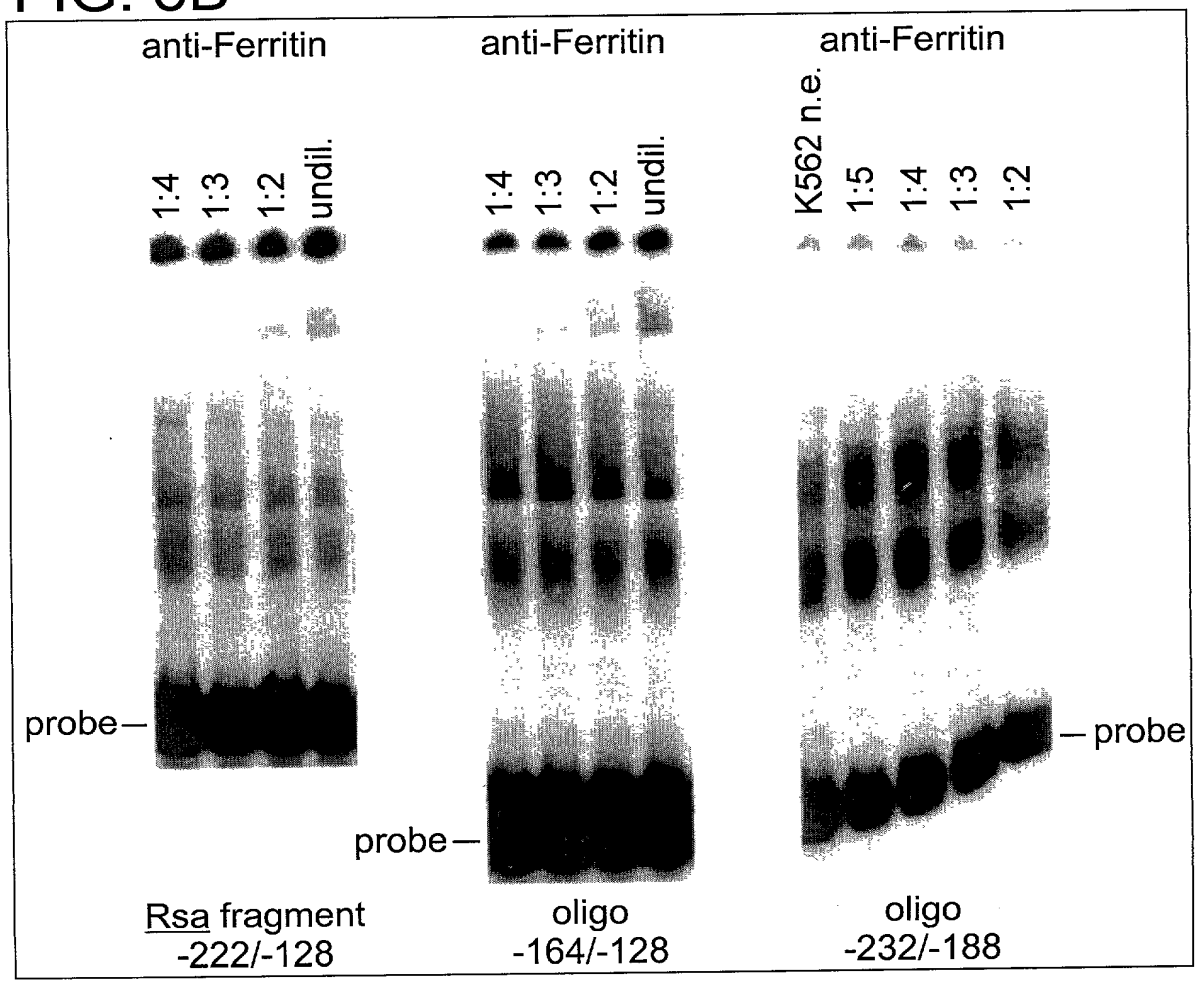
anti-Ferritin
anti-Ferritin
anti-Ferritin
1:4
1:3
1:2
undil.
1:4
1:3
1:2
undil.
K562 n.e.
1:5
1:4
1:3
1:2
probe
probe
probe
Rsa fragment
-222/-128
oligo
-164/-128
oligo
-232/-188

FIG. 4A

WT and Mutant Oligonucleotides of -164/-128, 5′ ß-Globin

WT sequence:	5′ AACTCCTAAGC**CAGTGC**CAGAAGAGCCAAGGACAGGT	3′
Mutant #1 (-162/-157):	5′ AA**GGGGGG**AGCCAGTGCCAGAAGAGCCAAGGACAGGT	3′
Mutant #2 (-144/-139):	5′ AACTCCTAAGCCAGTGCCAG**AAAAAA**CAAGGACAGGT	3′
Mutant #3 (-135/-130):	5′ AACTCCTAAGCCAGTGCCAGAAGAGCCAA**CCCCCC**GT	3′
Mutant #4 (-153/-148):	5′ AACTCCTAAGC**AAAAAA**CAGAAGAGCCAAGGACAGGT	3′

FIG. 4B

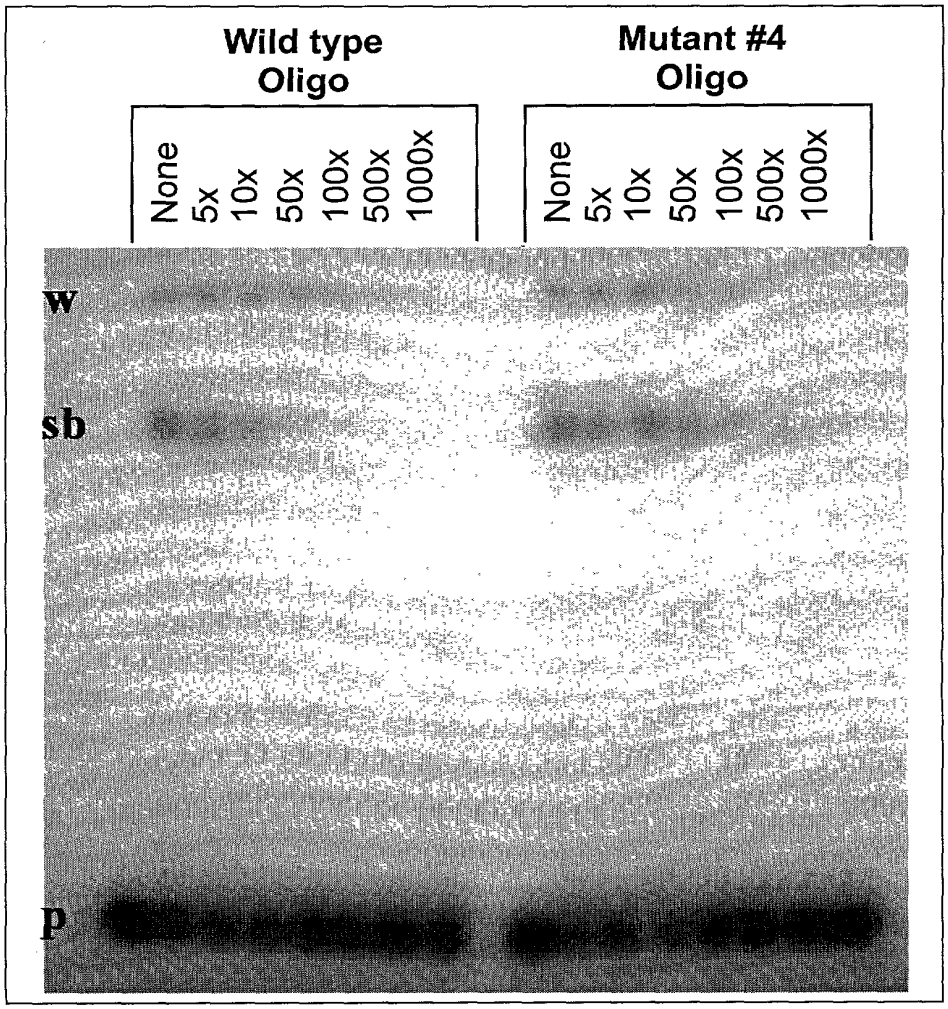

FIG. 4C

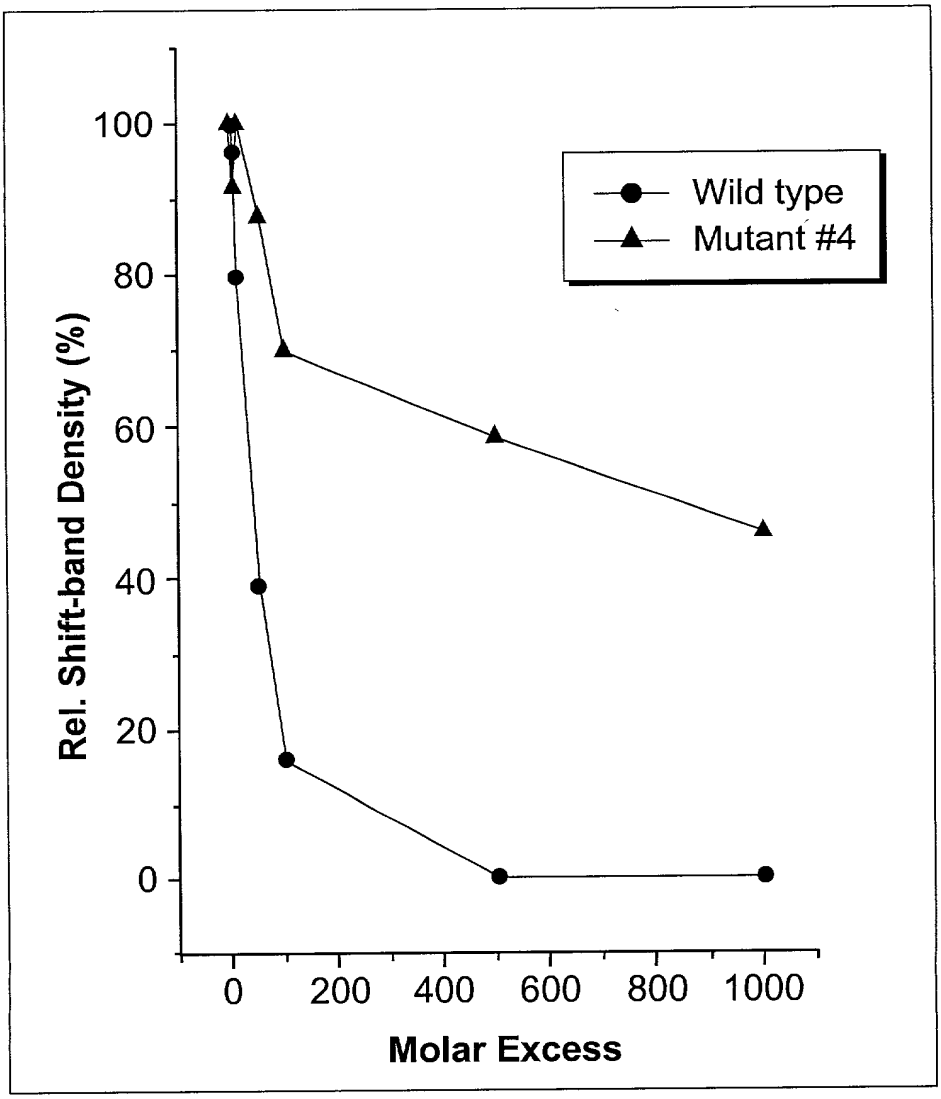

FIG. 4D

Competitor Oligonucleotide	Molar Excess producing 50 % Inhibition
Wild type (WT)	42x
Mutant #1	30x
Mutant #2	38x
Mutant #3	35x
Mutant #4	**850x**

FIG. 5

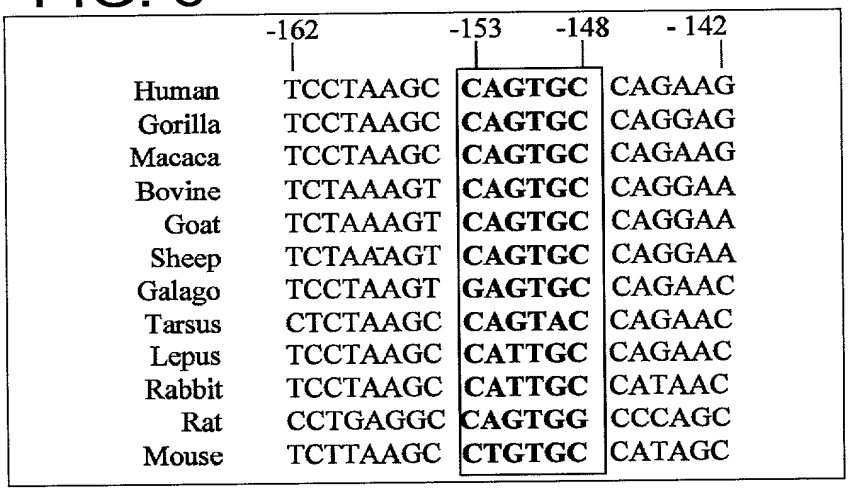
-162
-153
-148
- 142
Human TCCTAAGC CAGTGC CAGAAG
Gorilla TCCTAAGC CAGTGC CAGGAG
Macaca TCCTAAGC CAGTGC CAGAAG
Bovine TCTAAAGT CAGTGC CAGGAA
Goat TCTAAAGT CAGTGC CAGGAA
Sheep TCTAAAGT CAGTGC CAGGAA
Galago TCCTAAGT GAGTGC CAGAAC
Tarsus CTCTAAGC CAGTAC CAGAAC
Lepus TCCTAAGC CATTGC CAGAAC
Rabbit TCCTAAGC CATTGC CATAAC
Rat CCTGAGGC CAGTGG CCCAGC
Mouse TCTTAAGC CTGTGC CATAGC

FIG. 6

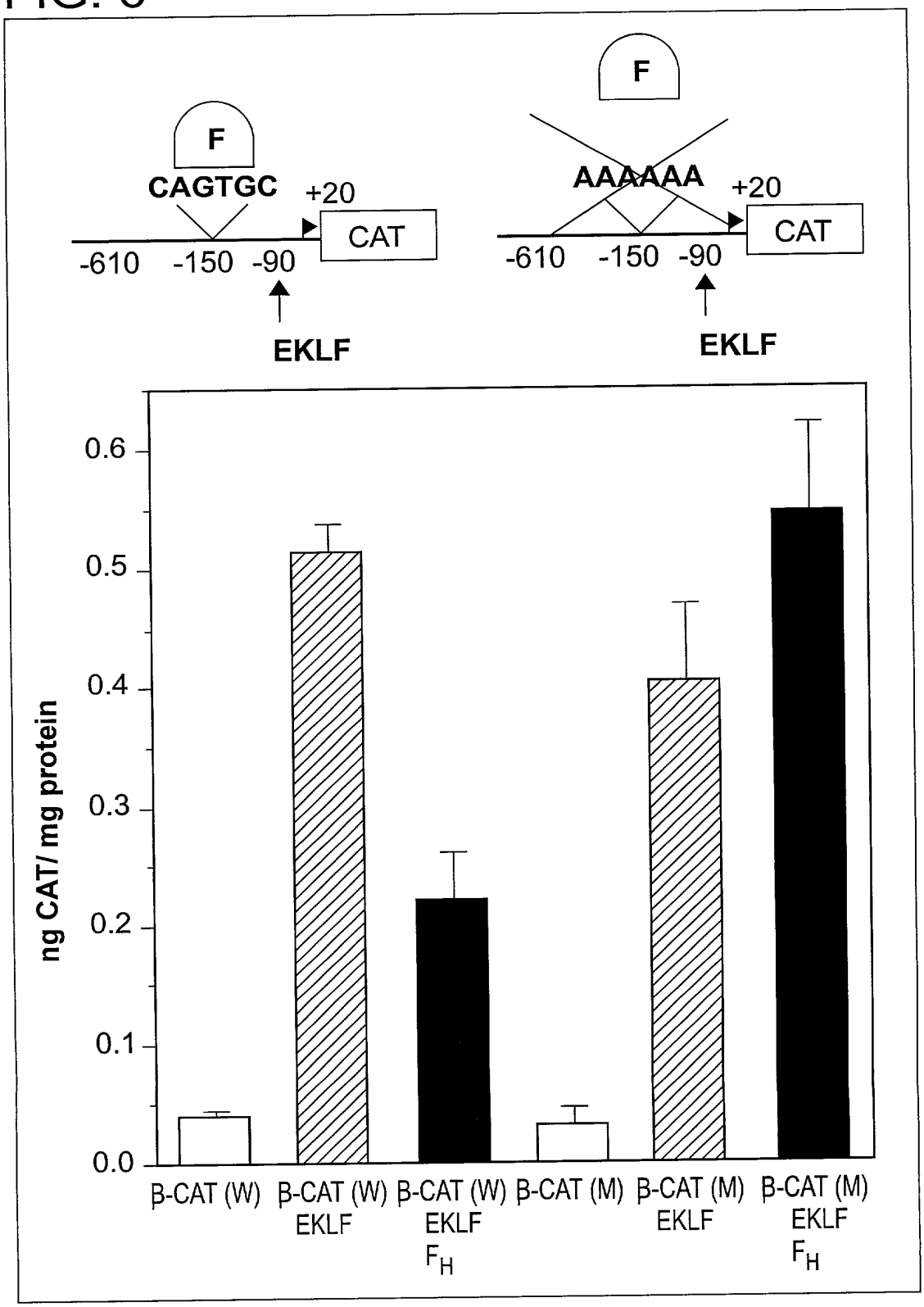
F
CAGTGC
+20
CAT
-610
-150
-90
EKLF
F
AAAAAA
+20
CAT
-610
-150
-90
EKLF
ng CAT/ mg protein
0.6
0.5
0.4
0.3
0.2
0.1
0.0
β-CAT (W)
β-CAT (W) EKLF
β-CAT (W) EKLF F_H
β-CAT (M)
β-CAT (M) EKLF
β-CAT (M) EKLF F_H

FIG. 7

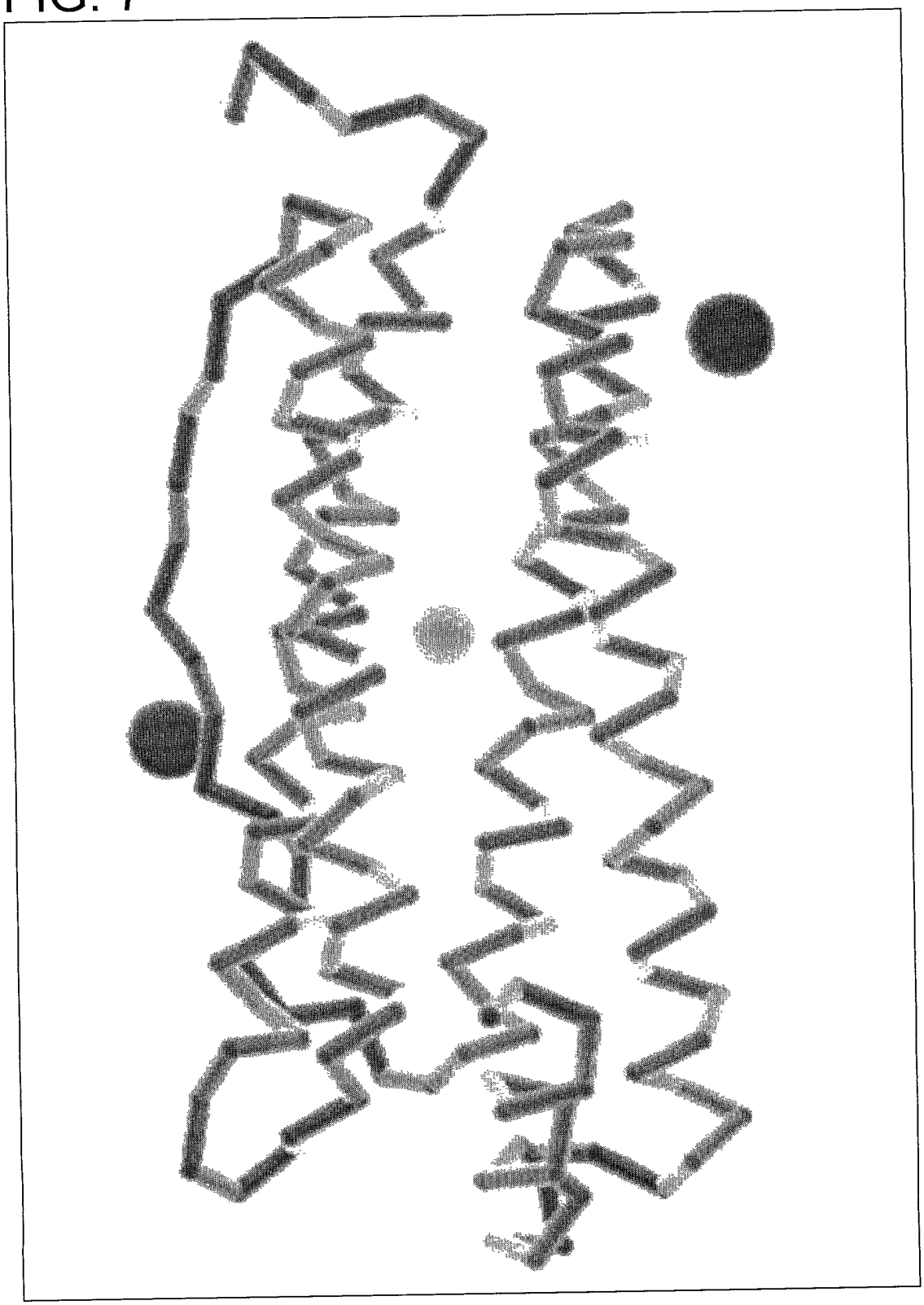

FIG. 8

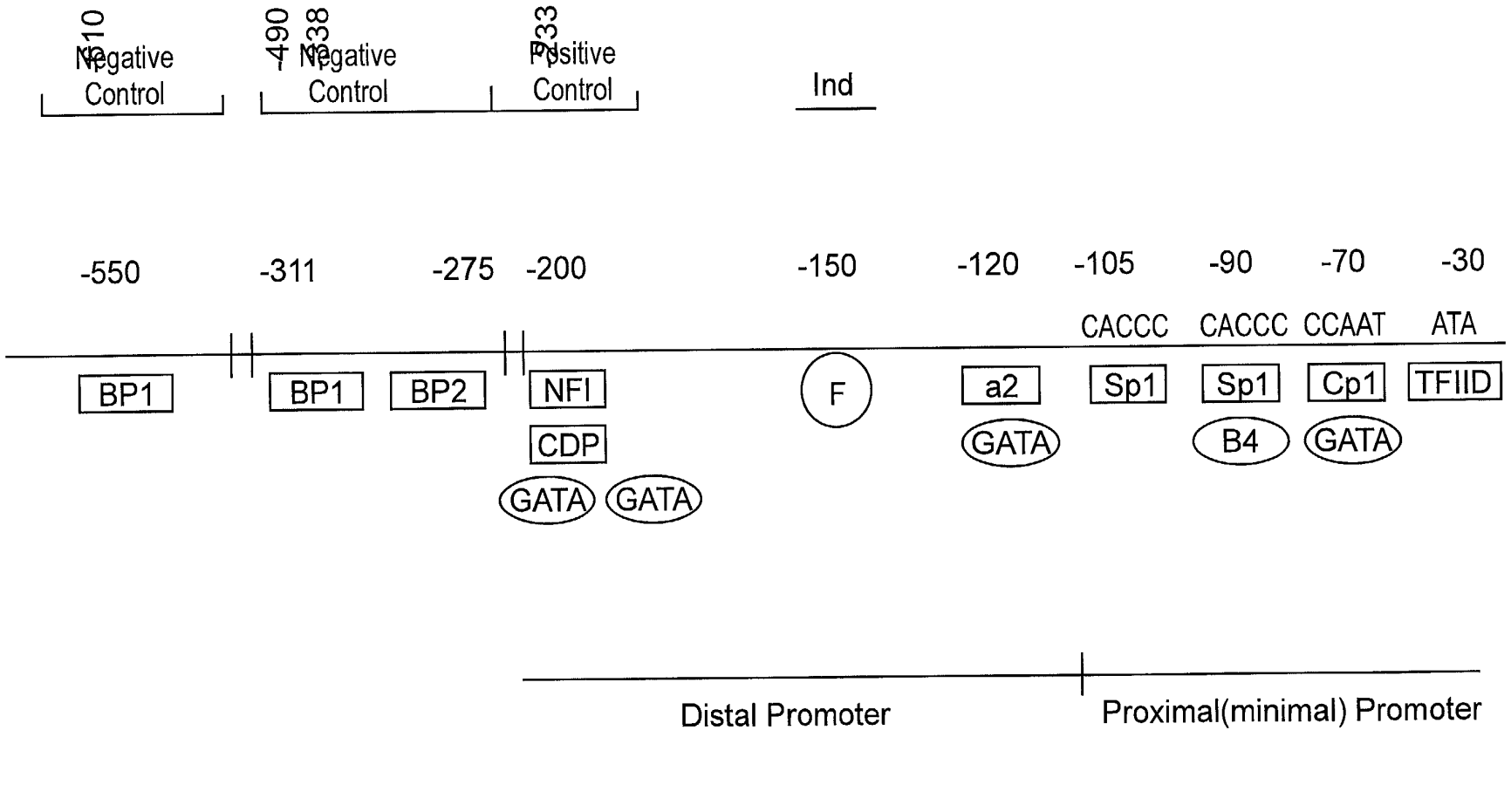

FIG. 9

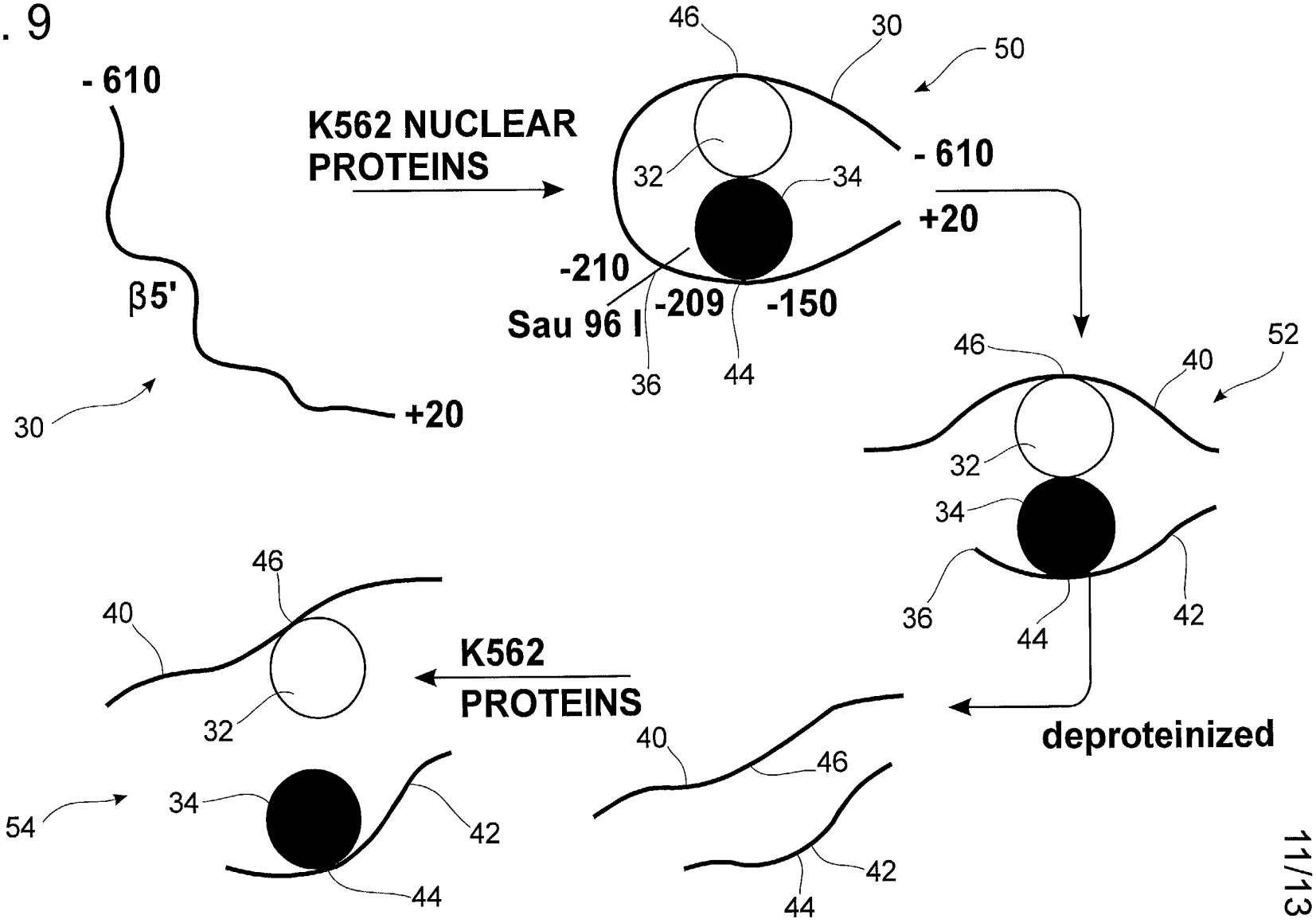
- 610
β5'
30
+20
K562 NUCLEAR PROTEINS
46
30
50
32
34
- 610
+20
-210
-209
-150
Sau 96 I
36
44
46
52
40
32
34
36
44
42
deproteinized
K562 PROTEINS
46
40
32
54
34
42
44
40
46
42
44

FIG. 10

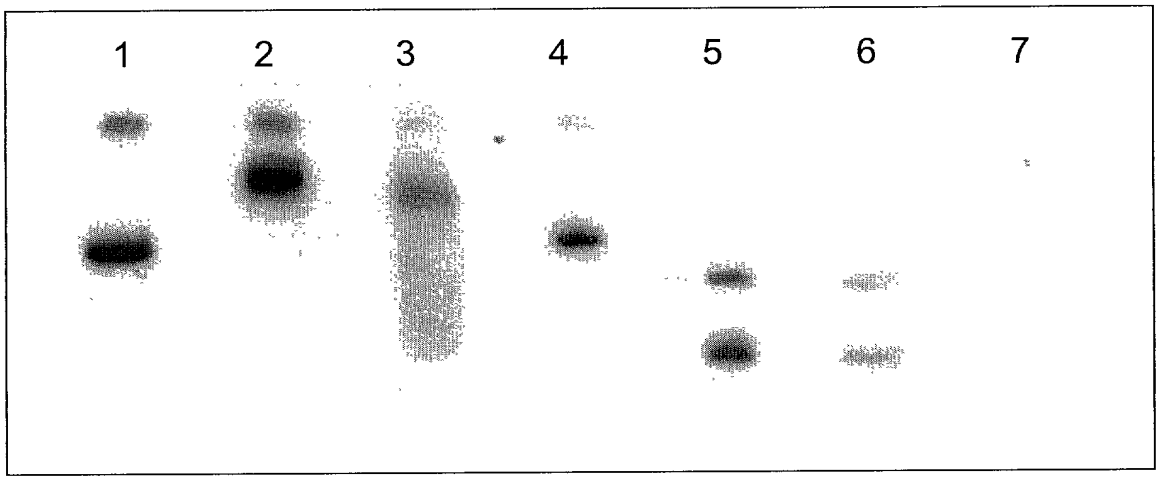

FIG. 11

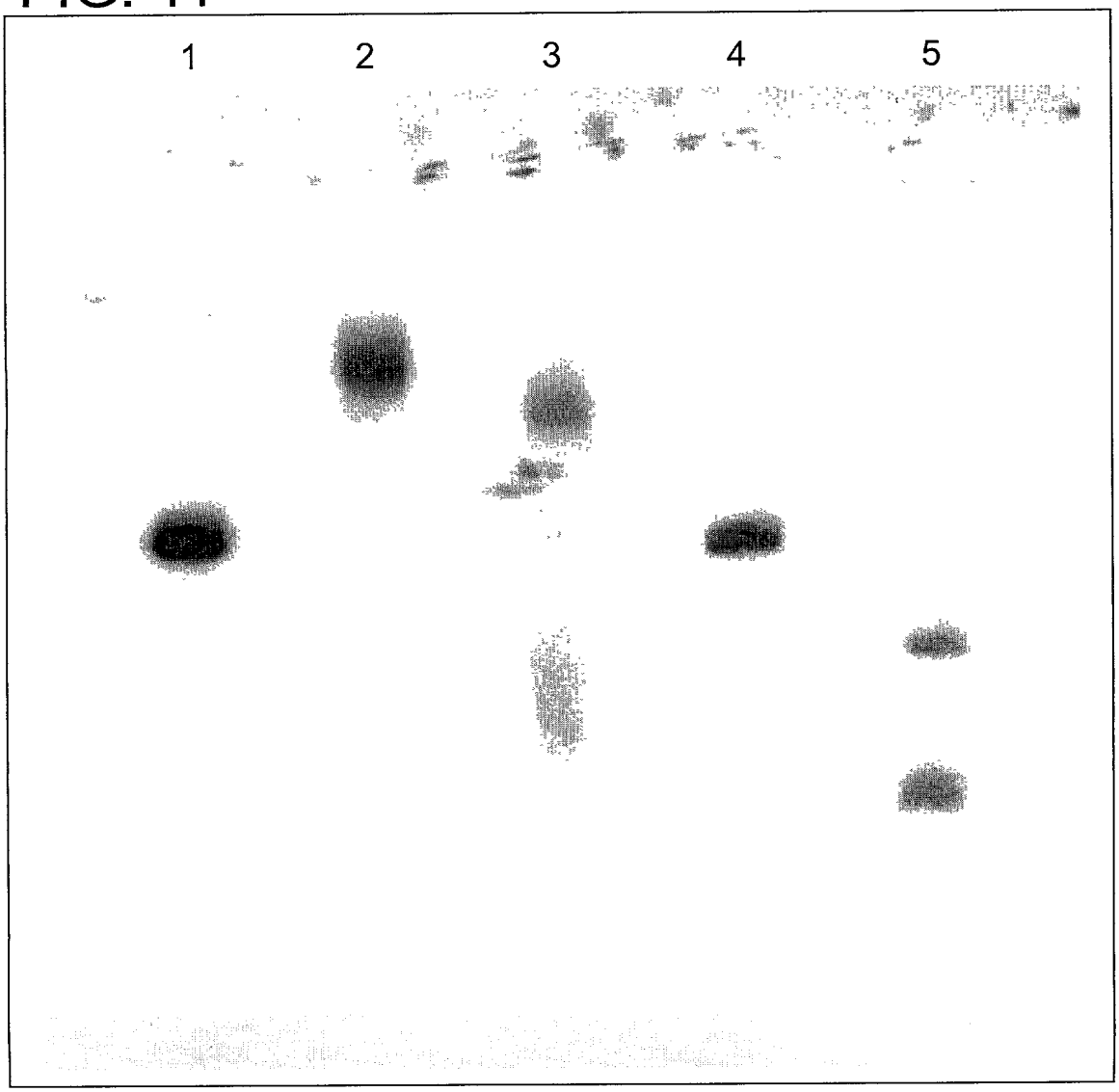

FIG. 12